Keiji Hayashi

List of Publications by Year
in descending order

53	2,723	236925 25	175258 52
papers	citations	h-index	g-index

56	56	56	1438
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	An Electric-field-driven Global Coronal Magnetohydrodynamics Simulation Model Using Helioseismic and Magnetic Imager Vector-magnetic-field Synoptic Map Data. Astrophysical Journal, 2022, 930, 60.	4.5	7
2	Coupling a Global Heliospheric Magnetohydrodynamic Model to a Magnetofrictional Model of the Low Corona. Astrophysical Journal, Supplement Series, 2021, 254, 1.	7.7	6
3	Comparative Study of Data-driven Solar Coronal Field Models Using a Flux Emergence Simulation as a Ground-truth Data Set. Astrophysical Journal, 2020, 890, 103.	4.5	26
4	The Coronal Global Evolutionary Model: Using HMI Vector Magnetogram and Doppler Data to Determine Coronal Magnetic Field Evolution. Astrophysical Journal, Supplement Series, 2020, 250, 28.	7.7	22
5	Parametric Study of ICME Properties Related to Space Weather Disturbances via a Series of Three-Dimensional MHD Simulations. Solar Physics, 2019, 294, 1.	2.5	7
6	The Role of a Tiny Brightening in a Huge Geoeffective Solar Eruption Leading to the St. Patrickâ€™s Day Storm. Astrophysical Journal, 2019, 874, 73.	4.5	1
7	Magnetohydrodynamic Simulations for Solar Active Regions using Time-series Data of Surface Plasma Flow and Electric Field Inferred from Helioseismic Magnetic Imager Vector Magnetic Field Measurements. Astrophysical Journal Letters, 2019, 871, L28.	8.3	25
8	An MHD Simulation of Solar Active Region 11158 Driven with a Time-dependent Electric Field Determined from HMI Vector Magnetic Field Measurement Data. Astrophysical Journal, 2018, 855, 11.	4.5	38
9	Prospective Out-of-ecliptic White-light Imaging of Coronal Mass Ejections Traveling through the Corona and Heliosphere. Astrophysical Journal, 2018, 852, 111.	4.5	5
10	Prospective White-light Imaging and In Situ Measurements of Quiescent Large-scale Solar-wind Streams from the Parker Solar Probe and Solar Orbiter. Astrophysical Journal, 2018, 868, 137.	4.5	7
11	Relation Between Coronal Hole Areas and Solar Wind Speeds Derived from Interplanetary Scintillation Measurements. Solar Physics, 2017, 292, 1.	2.5	30
12	Prospective Out-of-ecliptic White-light Imaging of Interplanetary Corotating Interaction Regions at Solar Maximum. Astrophysical Journal, 2017, 844, 76.	4.5	7
13	Vector Magnetic Field Synoptic Charts from the Helioseismic and Magnetic Imager (HMI). Solar Physics, 2017, 292, 1.	2.5	26
14	LONG-TERM TREND OF SOLAR CORONAL HOLE DISTRIBUTION FROM 1975 TO 2014. Astrophysical Journal Letters, 2016, 827, L41.	8.3	21
15	Comparison of potential field solutions for Carrington Rotation 2144. Journal of Geophysical Research: Space Physics, 2016, 121, 1046-1061.	2.4	13
16	MHDâ€IPS analysis of relationship among solar wind density, temperature, and flow speed. Journal of Geophysical Research: Space Physics, 2016, 121, 7367-7384.	2.4	10
17	Exploration of solar photospheric magnetic field data sets using the UCSD tomography. Space Weather, 2016, 14, 1107-1124.	3.7	10
18	STRUCTURE AND STABILITY OF MAGNETIC FIELDS IN SOLAR ACTIVE REGION 12192 BASED ON NONLINEAR FORCE-FREE FIELD MODELING. Astrophysical Journal, 2016, 818, 168.	4.5	33

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19	The Coronal Global Evolutionary Model: Using HMI Vector Magnetogram and Doppler Data to Model the Buildup of Free Magnetic Energy in the Solar Corona. Space Weather, 2015, 13, 369-373.	3.7	51
20	The Helioseismic and Magnetic Imager (HMI) Vector Magnetic Field Pipeline: Magnetohydrodynamics Simulation Module for the Global Solar Corona. Solar Physics, 2015, 290, 1507-1529.	2.5	29
21	MAGNETOHYDRODYNAMIC SIMULATION OF THE X2.2 SOLAR FLARE ON 2011 FEBRUARY 15. II. DYNAMICS CONNECTING THE SOLAR FLARE AND THE CORONAL MASS EJECTION. Astrophysical Journal, 2015, 803, 73.	4.5	56
22	MHD analysis of the velocity oscillations in the outer heliosphere. Geophysical Research Letters, 2014, 41, 1420-1424.	4.0	4
23	STATISTICAL ANALYSIS OF THE HORIZONTAL DIVERGENT FLOW IN EMERGING SOLAR ACTIVE REGIONS. Astrophysical Journal, 2014, 794, 19.	4.5	24
24	MAGNETOHYDRODYNAMIC SIMULATION OF THE X2.2 SOLAR FLARE ON 2011 FEBRUARY 15. I. COMPARISON WITH THE OBSERVATIONS. Astrophysical Journal, 2014, 788, 182.	4.5	73
25	MAGNETIC HELICITY IN EMERGING SOLAR ACTIVE REGIONS. Astrophysical Journal, 2014, 785, 13.	4.5	49
26	The Helioseismic and Magnetic Imager (HMI) Vector Magnetic Field Pipeline: Optimization of the Spectral Line Inversion Code. Solar Physics, 2014, 289, 3531-3547.	2.5	88
27	The Helioseismic and Magnetic Imager (HMI) Vector Magnetic Field Pipeline: Overview and Performance. Solar Physics, 2014, 289, 3483-3530.	2.5	437
28	The Helioseismic and Magnetic Imager (HMI) Vector Magnetic Field Pipeline: SHARPs â€“ Space-Weather HMI Active Region Patches. Solar Physics, 2014, 289, 3549-3578.	2.5	471
29	Properties of High-Frequency Wave Power Halos Around Active Regions: An Analysis of Multi-height Data from HMI and AIA Onboard SDO. Solar Physics, 2013, 287, 107-127.	2.5	31
30	MAGNETIC STRUCTURE PRODUCING X- AND M-CLASS SOLAR FLARES IN SOLAR ACTIVE REGION 11158. Astrophysical Journal, 2013, 770, 79.	4.5	43
31	An MHD simulation model of timeâ€dependent global solar corona with temporally varying solarâ€surface magnetic field maps. Journal of Geophysical Research: Space Physics, 2013, 118, 6889-6906.	2.4	27
32	Making global map of the solar surface B_r from the HMI vector magnetic field observations. Journal of Physics: Conference Series, 2013, 440, 012036.	0.4	3
33	The MHD simulation of the inner heliosphere over 9 years using the observation-based time-varying boundary data. AIP Conference Proceedings, 2012, , .	0.4	2
34	A preliminary analysis of dynamic and realistic heliosphere using interplanetary scintillation and photospheric magnetic data. AIP Conference Proceedings, 2012, , .	0.4	1
35	How much more can sunspots tell us about the solar dynamo?. Proceedings of the International Astronomical Union, 2012, 8, 25-36.	0.0	1
36	A NON-RADIAL ERUPTION IN A QUADRUPOLAR MAGNETIC CONFIGURATION WITH A CORONAL NULL. Astrophysical Journal, 2012, 757, 149.	4.5	60

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37	DETECTION OF THE HORIZONTAL DIVERGENT FLOW PRIOR TO THE SOLAR FLUX EMERGENCE. Astrophysical Journal, 2012, 751, 154.	4.5	21
38	An MHD simulation model of timeâ€dependent coâ€rotating solar wind. Journal of Geophysical Research, 2012, 117, .	3.3	31
39	EVOLUTION OF MAGNETIC FIELD AND ENERGY IN A MAJOR ERUPTIVE ACTIVE REGION BASED ONSDO/HMI OBSERVATION. Astrophysical Journal, 2012, 748, 77.	4.5	315
40	Comparison of Line-of-Sight Magnetograms Taken by the Solar Dynamics Observatory/Helioseismic and Magnetic Imager and Solar and Heliospheric Observatory/Michelson Doppler Imager. Solar Physics, 2012, 279, 295-316.	2.5	203
41	A New Method for Polar Field Interpolation. Solar Physics, 2011, 270, 9-22.	2.5	72
42	Nonâ€dipolar solar wind structure observed in the cycle 23/24 minimum. Geophysical Research Letters, 2009, 36, .	4.0	39
43	MHD simulations of the global solar corona around the Halloween event in 2003 using the synchronic frame format of the solar photospheric magnetic field. Journal of Geophysical Research, 2008, 113, .	3.3	16
44	Validation of Two MHD Models of the Solar Corona with Rotational Tomography. Astrophysical Journal, 2008, 682, 1328-1337.	4.5	15
45	IPS tomographic observations of 3D solar wind structure. Astronomical and Astrophysical Transactions, 2007, 26, 467-476.	0.2	22
46	MHD simulation of two successive interplanetary disturbances driven by cone-model parameters in IPS-based solar wind. Geophysical Research Letters, 2006, 33, .	4.0	21
47	Three-Dimensional Magnetohydrodynamic Simulation of a Global Solar Corona Using a Temperature Distribution Map Obtained from SOHO EIT Measurements. Astrophysical Journal, 2006, 636, L165-L168.	4.5	20
48	The 2003 Octoberâ€“November Fast Halo Coronal Mass Ejections and the Largeâ€scale Magnetic Field Structures. Astrophysical Journal, 2006, 640, 1135-1141.	4.5	29
49	Magnetohydrodynamic Simulations of the Solar Corona and Solar Wind Using a Boundary Treatment to Limit Solar Wind Mass Flux. Astrophysical Journal, Supplement Series, 2005, 161, 480-494.	7.7	80
50	Fast solar wind after the rapid acceleration. Journal of Geophysical Research, 2004, 109, .	3.3	20
51	Polar low-speed solar wind reappeared at the solar activity maximum of cycle 23. Geophysical Research Letters, 2003, 30, .	4.0	9
52	MHD tomography using interplanetary scintillation measurement. Journal of Geophysical Research, 2003, 108, .	3.3	45
53	How did the solar wind structure change around the solar maximum? From interplanetary scintillation observation. Annales Geophysicae, 2003, 21, 1257-1261.	1.6	20